

NEW COLLEGE ENVIRONMENTAL STUDIES PROGRAM

- 1. Ten students completed an ecological study of the spoil islands in Sarasota Bay and the Charlotte Harbor area through a grant from the National Science Foundation.**
- 2. A student project leader has submitted a research grant proposal to the National Science Foundation to study the potential toxic effects of herbicides, pesticides, lead (from gasoline outboard engines), and sewage effluents in our waters. The project would also study the effects of waterfront residential and commercial development on several selected marine organisms, and determine the toxic level of various pollutants.**
- 3. Students are cataloguing the presence and distribution of marine organisms to discover what species are in Sarasota Bay and their location. This is part of a continuing study started three years ago by the College to develop an annotated check list of marine organisms to be used as a reference for identification and to monitor change.**
- 4. As part of the continuing New College environmental studies program, a student is studying the different types of plankton organisms between Tampa Bay and Charlotte Harbor. A dozen collection stations have already been established. This project will not only identify plankton, but will determine the quality of the water and pollutant effects on these marine organisms. The project is expected to continue for three or four seasons. This particular project is supplemented by previous projects undertaken by students who have identified phyto plankton in the vicinity of Whitaker Bayou.**
- 5. Extensive surveys have been scheduled in the vicinity of Otter Key to compare the number and kinds of marine species with those found in Charlotte Harbor near Devilfish Key.**
- 6. A student has prepared a research thesis dealing with laboratory culturing of two species of planktonic diatoms to test and compare their growth and survival in polluted and non-polluted waters.**
- 7. The New College environmental biology course has been engaged in a preliminary ecological study of marine plant and animal life in different parts of Sarasota Bay for the past three years.**

8. A program was conducted to study the feasibility using plastic grasses in disturbed shallow waters to create an artificial habitat for marine organisms. The natural environment could not be duplicated because of the plastic's inability to endure, but substantial data were recorded concerning the types of microscopic organisms which were found in the artificial grass flats as opposed to those in a natural environment.

9. Three students created an artificial reef of tires and concrete in the Gulf of Mexico off Turtle Beach to establish the capability or inability of artificial reefs to attract marine life.

10. A continuing project is being conducted to study mangrove ecology and mangrove management in natural areas and disturbed areas near waterfront developments.